

CLAIMS

1. Recombinant conglutinin comprising a native conglutinin fragment, wherein said recombant conglutinin comprises a collagen region having two units of amino acids sequence of Gly-Xaa-Xaa (SEQ ID NO. 3), a neck region of the native conglutinin and a carbohydrate recognition domain of the native conglutinin, and 2<sup>nd</sup> and 3<sup>rd</sup> amino acids in said amino acid sequence of Gly-Xaa-Xaa are protein-constituting amino acid.

2. A method for producing the recombinant conglutinin comprising a native conglutinin fragment comprising the steps of:

(a) preparing a vector inserted therein cDNA corresponding to 613 bp through 1113 bp of the native conglutinin DNA,

(b) obtaining transformants by introducing said vector into *Escherichia coli* JM109,

(c) incubating said transformants in an appropriate medium,

(d) infecting said incubated transformants with phage, and

(e) collecting recombinant conglutinin from the phage-infected transformants,

wherein said recombinant conglutinin comprises a collagen region having two units of amino acids sequence of Gly-Xaa-Xaa (SEQ ID NO. 3), a neck region of the native conglutinin and a carbohydrate recognition domain of the native conglutinin, and 2<sup>nd</sup> and 3<sup>rd</sup> amino acids in said amino acid sequence of Gly-Xaa-Xaa are protein-constituting amino acid.

3. A method for detecting an anti-virus activity of the collectins comprising the steps of:

(a) preparing cells infected with virus(es),

(b) co-presenting the infected cells with the collectins, and

(c) evaluating a inhibition level on budding of viruses in said cells.

4. The method for detecting the anti-virus activity according to the claim 3, wherein said collectins are materials selected from the group consisting of the mannan-binding protein (MBP), the human mannan-binding protein (hMBP), the conglutinin and the recombinant conglutinin.

5. The method for detecting the anti-virus activity according to the claim 3 or 4 wherein said virus is Influenza A virus.

6. Mannan-binding protein (MBP) having anti-Influenza A virus activity.

7. Human Mannan-binding protein (hMBP) having anti-Influenza A virus activity.

add  
a2

105011-80420001